



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,725	04/18/2005	Masahiro Ishida	OGW-0362	2313
23353 7590 01/08/2007 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1733	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/08/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/531,725

Applicant(s)

ISHIDA, MASAHIRO

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>041805</u> . | 6) <input type="checkbox"/> Other: ____  |

Art Unit: 1733

1) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan 711

3) **Claims 1-4 and 6 are rejected under 35 U.S.C. 102(a), (b) as being anticipated by Japan 711 (JP 2002-59711).**

Japan 711 discloses a pneumatic tire having a directional tread pattern comprising a "narrow circumferential groove" 20 having a width of 2 mm or less, four circumferential grooves 10 wherein the outer circumferential grooves 10B have a width Wg of 4-12 mm. In figures 1 and 2, Japan 711 shows a shallow circumferential groove at the center C wherein this shallow circumferential groove has a width greater than that of the "narrow circumferential groove" 20.

The claimed tire is anticipated by Japan 711's tire. The claimed auxiliary grooves read on the narrow circumferential grooves 20. The claimed straight main groove reads on the groove at the centerline C. The claimed arcuate curved main grooves read on

Art Unit: 1733

either grooves 10A or 10B. The chamfers form a curved upper edge on both sides of each of the circumferential grooves 10A, 10B. The curved upper edges of groove 10B are best seen in figure 3.

**4) Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 711 in view of Japan 609 (JP 6-270609).**

Japan 711, which is discussed above, is considered to anticipate claim 1. In any event: It would have been obvious to one of ordinary skill in the art to provide the center rib of Japan 711's directional tread pattern with a center groove having a width greater than the width (2 mm or less) for the narrow circumferential groove since Japan 609, directed to a directional tread having center ribs 6 for stability, suggests using a center circumferential groove 1 having a width such as 8 mm to improve wet performance (paragraph 14 of machine translation). As to claim 2, Japan 711's grooves 10A and 10B are formed to be in a see through state. As to claims 3 and 4, Japan 711 teaches inclined grooves. As to claim 5, Japan 711 teaches a width Wg of 4-12 mm and Japan 609 teaches width of 8 mm for groove 1, a width of 4-7 mm for arcuate grooves 3 and a width of 9 mm for groove 2. As to claim 6, Japan 711 teaches a width of 2 mm or less for groove 20. As to claim 7, Japan 609 teaches a width of 2-7 mm for an inclined groove.

Ikeda

**5) Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (US 6,340,040).**

Ikeda, directed to improved wet performance without sacrificing wear resistance, discloses a pneumatic tire having a tread comprising a center circumferential straight main groove 3, outer circumferential grooves 4 and lug grooves 7 wherein the lug groove 7 comprises a curved portion 7a2 and straight portion 7b. The lug grooves are circumferential formed so as to be continuous in a repeated manner. The claimed arcuate main grooves read on at least curved portions 7a2 of the lug grooves 7. The main grooves 3 and 4 have a groove width GW of more than 4% of the tread width. The tread width is 80-95% of the tire width. The groove width GW2 of the curved portions 7a2 of the lug grooves 7 have width of 25-60% of the groove width GW. In the example, the tire has a tire width W of 205 mm and a tread width TW of 164 mm. The illustrated tread is a non-directional tread (bidirectional tread). Ikeda teaches that the tread pattern may be a directional tread pattern. See column 4 lines 50-55. Ikeda does not recite narrow circumferential auxiliary grooves. However, it would have been obvious to one of ordinary skill in the art to provide Ikeda's directional tread pattern with auxiliary circumferential grooves having a width of less than 2 mm so as to have a width less than that of the main circumferential grooves and curved groove portions 7a2 since Japan 711 suggests providing a directional tread pattern with narrow circumferential grooves having a width less than 2 mm to increase wandering performance and prevent wear (paragraph 31 of machine translation). As to claim 2, Ikeda's grooves 7 are formed in a see through state. As to claims 3, 4 and 7, Ikeda teaches inclined grooves (groove portions 7a1 having groove width GW1 of 60-80% GW and shoulder grooves 9). As to claim 5, Ikeda teaches a groove width GW of more than 4% of the tread width

Art Unit: 1733

for straight center groove 3. As to claim 6, Japan 711 teaches a narrow circumferential groove width of less than 2 mm.

Remarks

6) The remaining references are of interest.

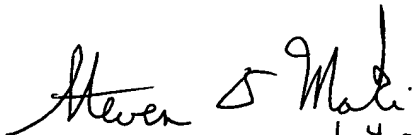
7) No claim is allowed.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki  
December 30, 2006

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
1-4-07